## 2003 Semiannual Report Criminal Justice Planning Unit



Nashville – Davidson County

Tennessee

**Volume I** 

#### 18 September 2003

Honorable Bill Purcell, Mayor of Davidson County, Nashville, TN Metro City Hall 225 Polk Avenue Nashville, TN 37203

Mayor,

On behalf of the Criminal Justice Planning Unit, I am pleased to present the first Ten Year Jail Population Projection Report for Davidson County, 2003-2012. This report provides information concerning correctional populations in Davidson County facilities under State and Local supervision. Included in the report is information on crime rates, the average daily correctional population, admissions into jail, average length of stay, and releases by bonding companies and the Pretrial Release Program, as well as forecasts for the average daily population.

The mission of our department is to provide policy makers in the criminal justice system accurate data in order to make informed management decisions for our system. In the coming years, the Criminal Justice Planning Unit will continue to provide semiannual reports, comparing actual and forecasted data.

Sincerely,

Donna Blackbourne Jones Director

# Ten Year Jail Population Projections For Davidson County Nashville, TN 2002-2012

The Criminal Justice Planning Unit

Metropolitan Government of Nashville and Davidson County

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September 2003

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#### **Acknowledgements**

The Criminal Justice Planning Unit would like to thank Mayor Bill Purcell, the Criminal Justice Steering Committee, and the Metropolitan Council for their support in the creation and funding of this new Metro department. We would also like to thank The Institute on Crime, Justice and Corrections for their training and guidance in producing this Population Projection Report.

Special thanks is extended to Daron Hall, Davidson County Sheriff and his jail management information staff, in helping us learn the JMS system, the major data source for this report.

We also wish to express our gratitude to Don Stoughton and Associates for his guidance and support during this initial development of our planning unit and producing our first forecasting report.

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#### **EXECUTIVE SUMMARY**

This report is the initial projection report produced by the Criminal Justice Planning Unit. Population projections for locally sentenced felons housed at the Metro Detention Center are included in this report. This report is recommended to serve as a baseline for future projections.

#### **Major Criminal Justice Trends, Davidson County**

- 1) From 1990 to 2000 the at risk population (males between 20 and 44) increased 9%, from 110,693 to 120,648. (*Table 1, page 8*)
- 2) Between the years 2000 to 2025 the overall at risk population growth is predicted to remain stable at 0.74%. (*Table 2, page 9*)
- 3) Part 1 crimes in Davidson County from 1963 to 2002 increased by 4.4%. Broken down between violent and property crime during this same time period, the increase is 9.4% and 3.9% respectively. In the last several years, 1997 to 2002, there has been a decrease in Part I crimes of -3.3% (violent 2.0% and property -3.9%). (Figure 2, page 11)
- 4) Arrests increased by 14% from 2001 to 2002, with an average annual increase of 1% since 1995. (*Table 3, page 14*)
- 5) The average daily jail population increased by an annual average of 4%, from 1996 to 2002, with an increase of 7.8% between 2001 and 2002. A recent report on jail statistics published by the Bureau of Justice Statistics (BJS) states that jail populations increased by 5.4% nationally between 2001 and 2002. (*Table 6, page 17*)
- 6) From 1996 to 2001, jail admissions have exhibited an average increase of 4.5% each year. In 2002, jail admissions increased 10.1% over 2001, raising the trend to an average increase of 5.3% each year since 1996. (*Table 7, page 20*)
- 7) The average length of stay in jail increased from 27 days in 1998 to 36 days in 2002. (Table 7, page 20)
- 8) From 1994 to 2002 total releases by Bonding Companies and the Pretrial Release Program have decreased by an annual average of 4.8%. (*Table 8, page 21*)
- 9) The average percent capacity for the Davidson County jail system increased from 102% in 2001 to 111% in 2002. Nationally, mid-year 2002, BJS reported jails were operating at an average of 93% rated capacity. (*Table 5, page 16*)

#### **Inmate Population Projections, Davidson County**

The Wizard 2000 simulation model was used to forecast the Davidson County inmate population. The model is based on known and assumed policies affecting the admissions into the jail system and the lengths of stay for current inmates.

Three projections, referred to as low, baseline, and high, were calculated for this report in order to project the average daily population through 2012.

The different assumptions used for the three projections were as follows:

• **Low:** Future admissions into the jail will increase at the rate of 1.0 % per year. More weight was given to a flatter demographic projection.

• **Baseline:** Future admissions into the jail will increase at the rate of 1.9% per year. Demographic and arrest factors were weighted equally.

• **High:** Future admissions into the jail will increase at the rate of 2.8% per year. More weight was given to an increasing arrest practices.

The following assumptions were used for all three projections:

- Sentencing and pretrial rates will remain the same as in 2002.
- Average length of stay will remain at the levels reported in 2002
- Sentenced and un-sentenced group compositions of future new commitments will be the same as admissions in 2002.

Currently, August 2003, the certified rated capacity total for all facilities is 2654.

The average daily inmate population in 2002 was 2,941.

#### Results for Projected Overall Average Daily Population 2003-2012 (Table 14, page 33)

- 1) The projected low average for 2012 is 3,409.
- 2) The projected baseline average for 2012 is 3,836.
- 3) The projected high average for 2012 is 4,146.
- 4) The average annual percent of change between 2003-2012:
  - a) Low, 1.3%
  - b) Baseline, 2.4%
  - c) High, 3.2%.

### Results for Projected Average Daily Population (ADP) for Different Legal Statuses 2003-2012 (Table 14, page 33)

- 1) The State Felons (TDOC) ADP was 40 inmates in 2002. By 2012, the TDOC ADP is projected to be:
  - a) Low 52
  - b) Baseline 55
  - c) High 63
- 2) The Locally Sentenced Felons ADP was 1,118 inmates in 2002. By 2012, the Locally Sentenced Felons ADP is projected to be:
  - a) Low 1.258
  - b) Baseline 1,435
  - c) High 1,526
- 3) The Pretrial (misdemeanors and felons) ADP was 955 inmates in 2002. By 2012, the Pretrial ADP is projected to be:
  - a) Low 1,284
  - b) Baseline 1,444
  - c) High 1,564

- 4) The Sentenced Misdemeanors/DUI ADP was 552 inmates in 2002. By 2012, the Sentenced Misdemeanors/DUI ADP is projected to be:
  - a) Low 533
  - b) Baseline 595
  - c) High 663
- 5) The Probation Violators/others ADP was 278 inmates in 2002. By 2012, the Probation Violators/others ADP is projected to be:
  - a) Low 281
  - b) Baseline 307
  - c) High 331

#### INTRODUCTION

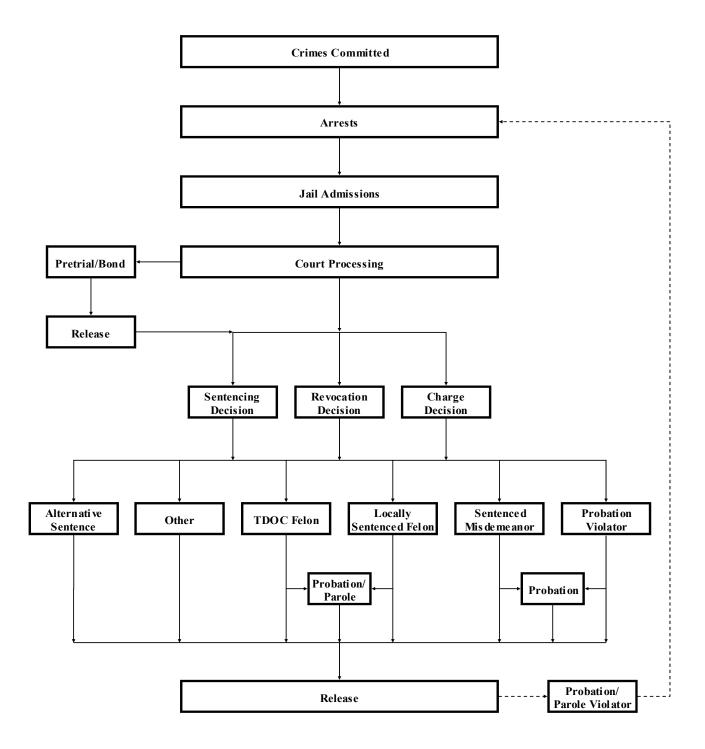
In early 2000, Mayor Bill Purcell formed a Criminal Justice Steering Committee to address the current and future needs of the Davidson County Criminal Justice System. Later in the same year, a strategic plan to address the Davidson County jail population growth was implemented.

One recommendation in the strategic plan was the development of a department, whose main purpose would be to forecast jail population trends. In January 2003, the Criminal Justice Planning Unit (CJPU) was funded. Its primary mission is to provide accurate data to the criminal justice policy makers in order to plan for the future of Davidson County.

In April 2001, before the unit was funded, Don Stoughton and Associates, consultant to Davidson County, contracted with the Institute on Crime, Justice and Corrections (ICJC) to produce a ten year population projection preliminary forecast for the Davidson County jail population. Using this preliminary report and updating information through 2002, the CJPU has produced this ten year population projection forecast.

The number of inmates admitted to the jail and their corresponding lengths of stay are the single most influential factors of the jail population. This report provides an overview of major demographic and criminal justice trends that either directly or indirectly have an impact on the number and types of persons housed in the Davidson County jails. This update serves to compare trends and assumptions published in the February 2002 report issued to Davidson County with actual trends over the past year. Figure 1, included in the original February 2002 report, illustrates how the various demographic and criminal justice trends inter-connect and influence with the Davidson County Jail system. This update represents the Criminal Justice Steering Committee's dedication to continue to monitor these trends so that proactive decisions can be made to help manage inmate crowding within the jails, and provide direction on resource deployment.

Figure 1 Overview of Criminal Justice Process in Davidson County



#### I. DAVIDSON COUNTY DEMOGRAPHIC POPULATION TRENDS

An important contributor to the size of a local correctional population is the size of the general population and, more directly, those persons who are most likely to be arrested and detained. The extent to which at the "at-risk" populations fluctuate impact crime rates, arrests, and correctional populations. Criminologists have found that crime and the number of persons processed by the local criminal justice system can be associated with certain key demographic attributes. Specifically, there are vast differences in the rates of criminal activity between males and females, and between younger and older populations.

This data underscores the importance of understanding the demographic trends of a particular jurisdiction with respect to gender, age, race, and ethnicity. Virtually all arrests for all crimes both in the United States and Davidson County are males under age 45, here labeled as the "at-risk" population. Nationally, males are arrested at a rate three times that of females and are incarcerated at a rate 16 to 18 times that of females. In the U.S., black and Hispanic males are arrested and incarcerated at a higher percent than white males. The federal government reports that an estimated 1 of every 15 persons (6.6%) can be expected to serve time in prison during his or her lifetime. The lifetime chances of a person going to prison are higher for men (9%) than for women (1%) and higher for blacks (16%) and Hispanics (9%) than for whites (2%). At current levels of incarceration, newborn black males in this country have a one in four chance of going to prison during their lifetimes, while Hispanic males have a 1 in 6 chance, and white males have a 1 in 23 chance of serving prison time. (Bureau of Justice Statistics, August 17, 2003)

#### A. Davidson County Total Population Trends

The total Davidson County resident population rose steadily through the early 1990s, declining slightly in 1998 and 1999, but increasing quickly in 2000. The population increased 11% from 530,050 in 1990 to 569,891 in 2000, showing an annual average increase of 1%. (*Table 1*)

#### B. At-Risk Population Trends

In 1990 the males at risk population was 110,693. This increased to 120,648 in 2000, which is an overall increase of 9% in the ten year period. Similar to the Davidson County total population, the at-risk population increased by an annual average of 1% between 1990 and 2000 (*Table 1*). In the February 2002 issue of this report, county projections by gender and age were not available and, therefore, no separate assumptions were made about the future growth of the "at-risk" population. This data is now available and presented in Table 2.

The Davidson County total population is projected to grow at an average annual rate of 0.74% over the next 25 years. The 2000 census estimated the population of the County at 569,891 persons. By 2010, that number is projected to increase to 608,434 and further to 685,103 in 2025. This increase of 115,000 persons is not projected to be fueled by a growth in the "at-risk" population. The "at-risk" population is expected to contract over the next 25 years at an average annual rate of .08%. Projections have this population fluctuating by 3,000 males over the next quarter century. The black male population, ages 20-44, is projected to remain relatively stable increasing from the 2000 census count of 27,679 to 32,200, a 16.3% increase. More striking, the white male

population, ages 20-44, is forecast to drop from 81,091 (2000 count) to 50,385, a 38% decrease. Males of other races, ages 20-44, comprised only 1.7% Davidson County in 2000. They are projected to make up over 5% by 2025. This demographic is projected to be the fastest growing portion of the "at-risk" population; future arrest rates and other trends for Davidson County will likely be heavily influenced by this portion of the population.

TABLE 1
DAVIDSON COUNTY DEMOGRAPHIC POPULATION
1990-2000

| Year                 | Total   | Females | Males   | Males 20-44 |
|----------------------|---------|---------|---------|-------------|
| 1990                 | 511,191 | 268,538 | 242,653 | 110,693     |
| 1991                 | 512,176 | 269,229 | 242,947 | 111,137     |
| 1992                 | 516,526 | 271,803 | 244,723 | 110,506     |
| 1993                 | 521,504 | 274,332 | 247,172 | 110,642     |
| 1994                 | 526,856 | 277,088 | 249,768 | 110,877     |
| 1995                 | 530,633 | 279,010 | 251,623 | 110,900     |
| 1996                 | 533,391 | 280,366 | 253,025 | 110,716     |
| 1997                 | 535,851 | 281,725 | 254,126 | 110,278     |
| 1998                 | 533,258 | 280,341 | 252,917 | 108,760     |
| 1999                 | 530,050 | 278,593 | 251,457 | 107,268     |
| 2000                 | 569,891 | 294,026 | 275,865 | 120,648     |
| % Change 1990-2000   | 11%     | 9%      | 14%     | 9%          |
| % Avg. Annual Change | 1%      | 1%      | 1%      | 1%          |

Source: U.S. Census Bureau, Census 2000 Redistricting Data (P.L. 94-171), Summary File, Table PL1, and 1990 Census;

TABLE 2
DAVIDSON COUNTY DEMOGRAPHIC POPULATION PROJECTIONS
2000-2025

| Year                       | Total<br>Population | Males<br>20-44 | White Males | Black Males<br>20-44 | Other Males<br>20-44 |
|----------------------------|---------------------|----------------|-------------|----------------------|----------------------|
| 2000*                      | 569,891             | 120,648        | 81,091      | 27,679               | 11,878               |
| 2001                       | 566,275             | 118,862        | 76,434      | 27,907               | 14,521               |
| 2002                       | 571,279             | 119,705        | 75,753      | 28,262               | 15,690               |
| 2003                       | 575,809             | 119,787        | 74,375      | 28,381               | 17,031               |
| 2004                       | 580,369             | 119,532        | 72,823      | 28,461               | 18,248               |
| 2005                       | 585,003             | 119,085        | 71,138      | 28,603               | 19,344               |
| 2010                       | 608,434             | 117,857        | 64,176      | 29,479               | 24,202               |
| 2015                       | 633,032             | 117,490        | 58,470      | 30,826               | 28,194               |
| 2020                       | 658,458             | 116,236        | 53,283      | 31,404               | 31,549               |
| 2025                       | 685,103             | 117,908        | 50,385      | 32,200               | 35,323               |
| Average Annual %<br>Change | 0.74%               | -0.09%         | -1.88%      | 0.61%                | 4.53%                |

\*Note: 2000 data is U.S. Census actual counts; 2001 to 2025 counts are projected.

Source: Davidson County TN 2002 Data Pamphlet, Woods and Poole Economics, Inc., Washington D.C. 20009.

U.S. Census Bureau, Census 2000 Redistricting Data (P.L. 94-171), Summary File, Table PL1.

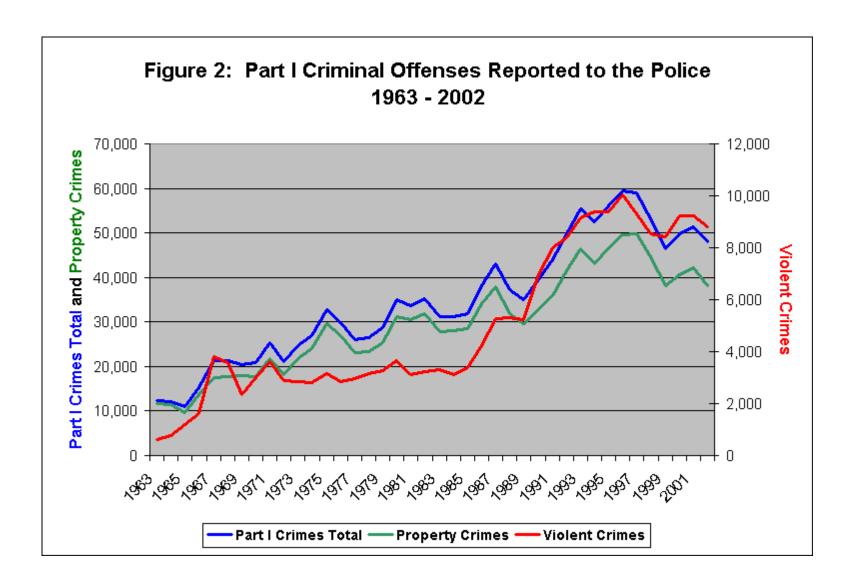
#### II. CRIME AND JUSTICE TRENDS

#### A. Reported Crime

Reported crime data was obtained from the Metropolitan Nashville Police Department (MNPD). Data is available for the number of (Figure 2) Part 1 criminal offenses reported in Nashville and Davidson County by year from 1963 through to 2002. Part I criminal offenses are homicide, rape, aggravated assault, robbery, burglary, larceny, and vehicle theft. The reported crimes are further characterized as violent crimes or property crimes. The data are reported in the graph in Figure 2 and the table in Appendix 1. Note that on Figure 2 Part I Crimes Total and Property Crimes are aligned along the first Y axis, which ranges from 0 to 70,000, and Violent Crimes are aligned along the second Y axis, which ranges from 0 to 12,000. Violent crime trends can be seen more easily this way.

Reported crimes have fluctuated over the years, but show an overall positive growth (Figure 2). From 1963 to 2002 the average annual reported crime rate increased by 4.4% for all Part I crimes, 3.9% for property crimes and 9.4% for violent crimes (Appendix 1). The period from 1990 to 1996 showed a rapid rise in reported crimes – violent crimes increased 10.1% and property crimes increased almost 8%, resulting in an average increase of 8.1% annually in total Part I crimes during this period. Interestingly, recent years have showed a moderate decrease in reported crime. During 1997 to 2002 property crimes decreased almost 4%, violent crimes decreased 2%, and all Part I crimes decreased 3.3%.

As stated above, violent crimes have been on the decrease in recent years. Violent crimes have decreased or stayed flat in 5 of the last 6 years (Appendix 1). It is interesting to note, however, that violent crimes have increased in terms of their overall proportion to total Part I reported crimes. Prior to the 1990's, violent crimes ranged from 5% to 15% of total reported crimes, averaging 11.5% of total reported crimes for that period. The 1990's saw a marked increase in this trend. Violent crimes averaged over 17% of all Part I crimes reported to the MNPD during 1990 to 2002, reaching highs of 18.5% in 2000 and 18.4% in 2002.



Note: Part I criminal offenses are homicide, rape, aggravated assault, robbery, burglary, larceny, and vehicle theft.

Source: Metropolitan Nashville Police Department, 2002 Annual Crime Analysis Report.

#### **B.** Adult Arrests

Adult arrest data was obtained directly from the Metropolitan Nashville Police Department's (MNPD) computer information system. Data is available for number of arrests by month and year from 1995 through to 2002. Arrests are broken down by offense type (Part I and/or Part II) in Table 3. Thus, fluctuations in arrests by offense type are indicative of whether arrest rates are increasing or decreasing for these offense categories. Arrests are further broken down into physical arrests and citations in Table 4. Fluctuations in physical arrests clearly have a greater impact in the daily jail population.

Adult arrests have fluctuated somewhat over the years, but show an overall negative growth. The percent of change decreased at an average annual rate of 1% between 1995 and 2000. Arrests increased in the period between 1996 and 1998, culminating in a high of 33,193 arrests in 1998. By 2000, the number of arrests fell to 27,376, the lowest count during this past six-year period. (*Table 4*)

In the February 2002 issue of this report, data for 2001 indicated that the arrest trend would continue to decline (Table 3). 2002 arrest data has contradicted this assumption. Adult arrests rose by 14% between 2001 and 2002, the largest increase over the past 8 years. The increase in arrests was significant enough to alter the average percent change since 1995 from a decline of 1% in 2001 to an increase of 1% in 2002.

Part I<sup>1</sup> arrests declined modestly over the past seven years, decreasing annually by an average of two% between 1995 and 2000. It is interesting to note, however, that current data for Part I arrests indicates an increase in terms of their proportion to overall arrests, compared to 1998. In 1995 Part I arrests composed one-third of all arrests, decreasing to 26% in 1998, and is now steadily rising back to one-third of the estimated 2001 total arrest data. This trend did not continue between 2001 and 2002. Part 1 arrests comprised only 19% of all adult arrests in 2002.

As stated in the February 2002 issue of this report, trends in Part II arrests are significant to consider since any sentences for those offenders involving a period of incarceration would more likely contribute to the jail populations. Part II arrests have increased by an average annual rate of 1% between 1995 and 2000. The number of Part II arrests increased from 43,175 in 1995, to a high of 54,428 in 1998, dropping to an estimated 41,652 in 2001. The increase in overall arrests in 2002 seems to have been fueled by a 17% increase in Part II arrests in 2002. This is the largest percent increase in Part II arrests in the past 8 years. The previous issue of this report saw arrests as following a stable trend, showing a slight decrease for more serious types of offenses, and an increase in the number of booked citations. Part II arrests had shown a decline in recent years. These patterns implied that arrest rates were stabilizing, and if Metro policies and practices remained constant, arrest numbers would not lead to an increase in the jail population. The reported numbers of 2002 arrests have called this assumption into question. Over the course of a single year the most dramatic rise in overall arrests in the past 8 years has mirrored a sharp increase in the average daily jail population. The basis for the increase in arrests is unclear. Davidson County reports that the number of officers with arrest powers in the Metropolitan Police Department increased by 4% last year. A much larger increase in the sworn officer force occurred in 1996 without a parallel increase in overall arrests.

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<sup>1</sup> Part I crimes include homicide, rape, robbery, aggravated assault, burglary, larceny/theft, and auto theft.

When looking at arrests in Davidson County from a different vantage, custodial arrests increased from 27,274 in 2001 to 30,083 (or 10%) in 2002. Citations issued for misdemeanor arrests increased from 22,223 in 2001 to 26,565 (or 19%) in 2002. A similar trend occurred in both of these arrest types in 1998. That year saw an overall arrest increase similar in scope to 2002 (13%). Table 4 lists physical arrests and citations issued from 1995 to 2002.

Succinctly, a slightly larger police force arrested more persons for Part II offenses (which include misdemeanors) in 2002. This trend fueled a sharp increase in overall arrests last year.

TABLE 3
DAVIDSON COUNTY ADULT ARREST TRENDS

| Year           | All<br>Arrests | %<br>Change | Part I<br>Arrests | %<br>Change | Part II<br>Arrests | %<br>Change | Sworn<br>Officers | %<br>Change |
|----------------|----------------|-------------|-------------------|-------------|--------------------|-------------|-------------------|-------------|
| 1995           | 52,836         |             | 9,661             |             | 43,175             |             | 1,150             |             |
| 1996           | 53,495         | 1%          | 8,879             | -8%         | 44,616             | 3%          | 1,234             | 7.30%       |
| 1997           | 55,771         | 4%          | 9,012             | 1%          | 46,759             | 5%          | 1,278             | 3.57%       |
| 1998           | 63,174         | 13%         | 8,746             | -3%         | 54,428             | 16%         | 1,266             | -0.94%      |
| 1999           | 58,921         | -7%         | 8,653             | -1%         | 50,268             | -8%         | 1,234             | -2.53%      |
| 2000           | 54,245         | -8%         | 10,830            | 25%         | 43,415             | -14%        | 1,246             | 0.97%       |
| 2001           | 53,091         | -2%         | 11,439            | 6%          | 41,652             | -4%         | 1,252             | 0.48%       |
| 2002           | 56,583         | 14%         | 10,511            | 4%          | 46,072             | 17%         | 1,303             | 4.07%       |
| Avg. 1995-2002 | 55,562         | 1%          | 9,554             | 2%          | 46,008             | 2%          | 1,245             | 1.85%       |

Sworn officers are all commissioned officers of the Metropolitan Police Department of Nashville/Davidson County with arrest powers.

Source: Metropolitan Nashville Police Department; Total Arrests, Part 1 Arrests, Total Booked Citations, Total Unbooked Citations, 1995 - 2000; Data Extract of Adult Physical Arrests and Citations, 2001-2002.

<sup>\*</sup>Note: Offenders arrested for an incident that involved both a Part I and a Part II offense may have been counted in both columns, inflating total arrests.

TABLE 4
DAVIDSON COUNTY ADULT ARREST TRENDS

| Year          | Physical<br>Arrests | % Change | Citations<br>Issued | % Change |
|---------------|---------------------|----------|---------------------|----------|
| 1995          | 29,048              |          | 16,598              |          |
| 1996          | 28,691              | -1%      | 19,112              | 15%      |
| 1997          | 30,041              | 5%       | 21,663              | 13%      |
| 1998          | 33,031              | 10%      | 26,000              | 20%      |
| 1999          | 30,549              | -8%      | 24,918              | -4%      |
| 2000          | 27,105              | -11%     | 21,363              | -14%     |
| 2001          | 27,658              | 2%       | 22,223              | 4%       |
| 2002          | 30,300              | 10%      | 26,556              | 19%      |
| Avg 1995-2002 | 29,553              | 1%       | 22,304              | 2%       |

Physical Arrest is a custodial arrest.

Citations are non-custodial arrests, and are only issued for misdemeanor offenses.

Source: Metropolitan Nashville Police Department; Total Arrests, Part 1 Arrests, Total Booked Citations, Total Unbooked Citations, 1995 - 2000; Data Extract of Adult Physical Arrests and Citations, 2001-2002.

#### **III. JAIL POPULATION TRENDS**

The DCSO currently operates three jail facilities, and a fourth facility being managed by the Corrections Corporation of America. Table 5 details the capacity, average daily population, and security level of these facilities. The overall jail capacity for the Davidson County system has been amended from 2,666 in 2001 to 2,654 in 2002. Capacities for all facilities have been certified by the Tennessee Corrections Institute. The percent capacity for all facilities increased from 2001, with the exception of the Correctional Work Center which saw a 1% decrease in its average operating% capacity. The ADP for the CWC dropped from 598 in 2001 to 595 in 2002. While the certified capacity for the county dropped 12 beds from 2001, the average daily population in Davidson County increased from 2,872 in 2001 to 2,941 in 2002, a 2% increase.

TABLE 5
OVERVIEW OF DAVIDSON COUNTY JAILS
2002

| Facility                     | 2002<br>Capacity | 2002<br>Avg Daily<br>Population | % Capacity | Security<br>Level  | Houses<br>Male/Female | Detention Status                                     |
|------------------------------|------------------|---------------------------------|------------|--------------------|-----------------------|--|
| Criminal Justice Center      | 688              | 649                             | 94%        | Medium/<br>Maximum | Male                  | All Statuses   |
| Hill Detention Center        | 474              | 467                             | 99%        | Medium             | Male                  | Pre-trial/Sentenced<br>Misdemeanants                 |
| Correctional Work Center     | 600              | 595                             | 99%        | Minimum            | Male                  | Pre-trial/Sentenced Felons, Pre-trial Misdemeanants  |
| Metro Detention Center (CCA) | 892              | 1,230                           | 138%       | Medium             | Male/Female           | All Status Females; Locally Sentenced Felons (Males) |
| Total                        | 2,654            | 2,941                           | 111%       | NA                 | NA                    | NA   |

Note: All facilities' capacities are certified by the Tennessee Corrections Institute.

Source: Davidson County Sheriff's Office

TABLE 6
ANNUAL STANDARD DEVIATION, AND HIGH/LOW COUNTS OF
JAIL POPULATION, 1996 to 2002

| Year    | ADP   | Percent<br>Change | Lowest Pop<br>Count | Highest Pop<br>Count | Standard<br>Deviation |
|---------|-------|-------------------|---------------------|----------------------|-----------------------|
| 1996    | 2,341 |                   | 1,591               | 2,456                | 103                   |
| 1997    | 2,502 | 6.9%              | 2,296               | 2,657                | 80                    |
| 1998    | 2,722 | 8.8%              | 2,348               | 3,015                | 159                   |
| 1999    | 2,898 | 6.5%              | 2,286               | 3,162                | 112                   |
| 2000    | 2,711 | -6.4%             | 2,420               | 3,170                | 84                    |
| 2001    | 2,729 | 0.7%              | 2,539               | 2,902                | 121                   |
| 2002    | 2,941 | 7.8%              | 2,723               | 3,041                | 95                    |
| Average | 2,692 | 4.0%              | 2,226               | 2,869                | 108                   |

Note: ADP = Average Daily Population. ADP includes locally sentenced felons, state sentenced felons in local facilities, sentenced misdemeanants, pre-trial felons, pre-trial misdemeanants, probation violators (felons and misdemeanants), and other miscellaneous inmates.

Source: Calculated from Davidson County Sheriff's Office's ADP counts

The average annual percent of change for the average daily population in the Davidson County jail system was 4% from 1996 to 2002. (Table 6). In the past year, the ADP saw a 7.8% increase.

The standard deviation in 1998, the only year that saw a similar increase in the ADP to 2002, was 159. The standard deviation for 2002 was 95. The standard deviation indicates the degree of fluctuation in the population from one day to the next, highlighting the variations and highs/lows of the population that is not captured by the ADP. As Table 6 depicts, the standard deviation of the daily jail population decreased in 2000 compared to 1998, indicating that as the average daily population decreased during this time frame, it also stabilized. 2001 was an exception to this trend, with a more widely fluctuating and unstable ADP standard deviation of 121. Further, while 2002 saw a larger increase in the ADP compared to 1998, it appears also to be more stable. It will be interesting to monitor this trend to see if average daily population continues to increase while the high/low variation continues to stabilize. Figure 3 displays the ADP for Davidson County from 1996 through 2002 with high and low peaking factors.

Admissions have also increased overall from 1996 to 2001 by an average annual rate of 4.5% (Table 7). This trend continued from 2001 to 2002 as admissions rose just over 10%. Jail admissions rose from 25,332 in 1996, to 37,635 in 1998, declining to an estimated 29,628 in 2001. Contrary to assumptions made in the February 2002 issue of this report, admissions saw a sharp increase compared to the steady decreases since 1998. 1998 saw the last significant increase in admissions until 2002 (just over 13%). These admission increases parallel similarities in 1998 and 2002 arrest and average daily population trends.

As reported in the last issue of this document, the declining admission numbers in recent years were contrasted by the increase in the average length of stay in Davidson County jails. Since 1998 the average LOS has increased from 27 days to 34 days in 2001 (at an average increase of 8%). This trend continued through 2002 as the average LOS rose to 36 days. The increase in the length of stay served to explain why the ADP did not drop significantly in recent years despite a steady decrease in admissions. The increase in the average LOS in 2002 coupled with dramatically larger admissions numbers reflects the equally dramatic 9.2% increase in the ADP.

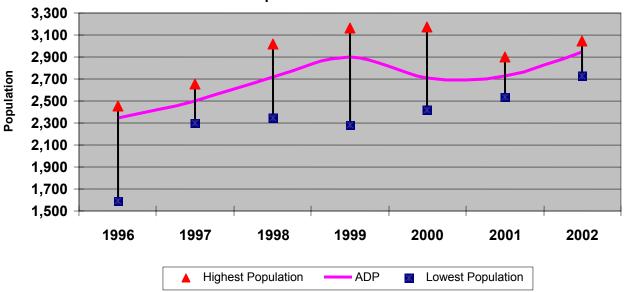
It is important to note that for 2002, and in fact for all future counts, the average length of stay was calculated from actual jail stay lengths in the Davidson County jail extract files. For previous years, the average LOS was calculated using the formula (ADP x 365.25 days)/Admissions.

Mirroring 2001, total pretrial and bond release numbers are on the decline in 2002. These releases dropped by an average annual rate of 4% from 1994 to 2001.(Table 8). With 2002 data included this annual decrease is now just under 5%. While total pretrial and bond releases continue to decrease in Davidson County, pretrial releases alone increased a dramatic 26.5% in 2002 from 4,185 in 2001 to 5,296 in 2002. 1998 was the last year in which this release type saw an increase. While bond releases decreased only 18% in 2002 they make up a significantly larger portion of total releases. As an aside, bond releases fell only 3.9% in 1998.

#### IV. EFFECT OF TRENDS ON THE JAIL POPULATION

In the February 2002 issue of this report, an assessment combining the county's overall population trends, indicates that conflicting patterns in arrests, jail admissions, jail pretrial releases, length of stay, and jail population numbers suggested that Davidson County was experiencing a period of minimal growth or stabilization, given that there were no changes in policy or procedures. Based on this assumption, 2002 data indicate that a significant change occurred in Davidson County procedures, especially reflected in the large increases in arrests. The increase in arrests seems to have fueled the overall admissions hike. Coupled with the continued increase in the average length of stay for persons housed in the Davidson County jail system, the average daily population increased 9.2% and the percent capacity of the system rose from 102% capacity in 2001 to 111% capacity in 2002. While pretrial releases increased significantly, the impact was negligible to the system as overall releases still dropped 4.5%.

Figure 3: Average Daily Population with Annual High and Low Population Counts



Note: ADP = Average Daily Population. ADP includes locally sentenced felons, state sentenced felons in local facilities, sentenced misdemeanants, pre-trial felons, pre-trial misdemeanants, probation violators (felons and misdemeanants), and other miscellaneous inmates.

Source: Calculated from Davidson County Sheriff's Office's ADP counts

TABLE 7
DAVIDSON COUNTY JAIL ADMISSIONS, AVERAGE DAILY POPULATION,
AND AVERAGE LOS BY YEAR
1996-2002

| Year | Total<br>Admissions | Admissions<br>Pct. Change | Total<br>Releases | Avg. LOS<br>(Days) | ADP   |
|------|---------------------|---------------------------|-------------------|--------------------|-------|
| 1996 | 25,331              |                           | n/a               | 34*                | 2,341 |
| 1997 | 33,239              | 31.22%                    | n/a               | 28*                | 2,502 |
| 1998 | 37,635              | 13.23%                    | n/a               | 27*                | 2,722 |
| 1999 | 35,370              | -6.02%                    | n/a               | 30*                | 2,898 |
| 2000 | 30,624              | -13.42%                   | n/a               | 32*                | 2,711 |
| 2001 | 29,628              | -3.25%                    | 29,383            | 34*                | 2,729 |
| 2002 | 32,621              | 10.10%                    | 32,503            | 36                 | 2,941 |

LOS = Length of Stay; ADP = Average Daily Population

\*Note: For years 1996-2001, Average LOS is calculated using the formula (ADP\*365.25)/Admissions.

For 2002 and beyond, the LOS is calculated as the actual jail stay length using admitted date and released date of each inmate.

Source: Davidson County Sheriff's Office Jail Management System. An extract file was taken of inmates released from the jail system from January 1, 2002 through December 31, 2002.

TABLE 8
PRETRIAL AND BOND RELEASE TRENDS IN THE
DAVIDSON COUNTY JAIL POPULATION
1994 TO 2002

| Year    | Pretrial<br>Releases | % Change   | Bond<br>Releases | % Change   | Total Pretrial/Bond<br>Releases | % Change    |
|---------|----------------------|------------|------------------|------------|---------------------------------|-------------|
| 1994    | 6,056                | ,0 0 nango | 14,063           | 70 Gilango | 20,119                          | 70 Gilaligo |
|         | ,                    |            | ,                |            | ,                               |             |
| 1995    | 6,446                | 6.4%       | 15,311           | 8.9%       | 21,757                          | 8.1%        |
| 1996    | 6,114                | -5.2%      | 11,456           | -25.2%     | 17,570                          | -19.2%      |
| 1997    | 5,272                | -13.8%     | 12,216           | 6.6%       | 17,488                          | -0.5%       |
| 1998    | 5,783                | 9.7%       | 11,739           | -3.9%      | 17,522                          | 0.2%        |
| 1999    | 5,125                | -11.4%     | 10,717           | -8.7%      | 15,842                          | -9.6%       |
| 2000    | 4,554                | -11.1%     | 11,077           | 3.4%       | 15,631                          | -1.3%       |
| 2001    | 4,185                | -8.1%      | 9,659            | -12.8%     | 13,844                          | -11.4%      |
| 2002    | 5,296                | 26.5%      | 7,921            | -18.0%     | 13,217                          | -4.5%       |
| Average | 5,426                | -0.9%      | 11,573           | -6.2%      | 16,999                          | -4.8%       |

Source: Davidson County Sheriff's Office; Criminal Court Clerk's Office; General Sessions Court Pretrial Services

#### V. ADMISSIONS, RELEASES, AND DAILY JAIL POPULATION OF DAVIDSON COUNTY

#### A. Description of Data Files and Limitations of the Analyses

For the February 2002 report, individual level data were requested from DCSO in the form of computer generated extract files containing raw data on inmates admitted, released, or in custody between December 1, 2001 and May 31, 2001. Since the Davidson County's database, the Jail Management System (JMS), lacked the necessary offender sentencing information required to build a simulation model, data was also requested from the TDOC Planning and Research Unit on state offenders housed in the county jail system. For this update to the February 2002 report, extract files were generated by Davidson County staff reflecting admission and releases for January 1, 2002 through December 31, 2002. The stock population snapshot was taken on January 15, 2003. These data were provided to the ICJC by Davidson County in summary table format. When comparing the information used for the February 2002 report and the information received for this update, it is clear that many of the data issues have been resolved by Davidson County and clear steps have been taken for county staff to move towards an independent forecasting unit using clearer and more comprehensive data.

#### **B.** Daily Population Characteristics

A summary of the demographic and offense characteristics of the jail population on January 15, 2003 can be found in Table 9. Below are some of the major highlights:

- Of the 2,899 inmates, 88% were male. The population was predominantly Black (62%), with White (38%) forming the second largest group. It is interesting to note that while the "at-risk" population for other races is projected to increase significantly in Davidson County over the next quarter century, Asians, Indian/Alaskans, and Hispanics comprised a very minimal percentage of the current snap shot population.
- A large portion of the inmates were between 21 to 30 years old (36%) and 31 to 40 years old (28%), with an average age of 32 years. The overall percentage of these two age groups saw a decline from the May 31, 2001 snapshot. Persons 20 and under and persons 40 and over made up a larger percentage of the 2003 snapshot (36% compared to only 25% last year).
- One-third of the population were placed at a minimum level of security (34.5%) and 36.1% were classified at a medium level (up from 29.9% in the 2001 snapshot). In the 2001 snapshot 22% of inmates did not receive a security level, this number has decreased to zero% in the current snapshot.
- 41% of the inmates were housed at the Metro Detention Center and 23.5% at the Criminal Justice Center, while less than 20% were housed at the Correctional Work Center. The Correctional Work Center was the only facility to see a decrease in percent capacity from 2001.
- When comparing legal status, the January 2003 snapshot is very similar to the 2001 snapshot. 38% of the population was state inmates in 2003 as compared to 36% in 2001. As with the 2001 snapshot, almost all of these state inmates were local sentenced felons. Local inmates made up 62.1% of the Davidson County jail

- population on January 15, 2003 a number similar to that on May 31, 2001.
- As with the 2001 snapshot, the local inmates are predominantly composed of pretrial offenders, (37%), and sentenced misdemeanants. Sentenced DUI offenders made up only 3% of the stock population on January 15, 2003.

Table 10 relates the January 15, 2003 Davidson County jail population by most serious charge and compares it to the May 31, 2001 snapshot. A full 40% of inmates in the 2003 snapshot were charged with crimes against the courts and government. Clarification of data for this stock population examination has allowed for a clearer picture of the non-violent charge group as compared to the 2001 stock snapshot. The crimes against the court charge group was classified as 'Other' in the analysis presented in the February 2002 report.

Inmates incarcerated for drug crimes, fell a full 10% between the stock population in 2001 (22%) and 2003 (12%). The percentage of violent crime charges was also lower in the 2003 stock population (26% versus 30% in 2001).

#### C. Jail Releases and Length of Stay

Table 11 presents the release categories, associated length of stay, and annual number of beds occupied for inmates released between January 1, 2002 and December 31, 2002. Similar to 2001 releases, 34% of all inmates released from the Davidson County jail system in 2002 completed their sentence; inmates classified under this release category comprised 50% of the jail system's average daily bed space.

The other principal release methods that occupied a significant portion of the beds in 2002 were probation (8% of releases, occupying 18% of the beds), paroled (less than 1% of releases occupying 5% of the beds), and transfer releases (8% of releases occupying 18% of the beds). Parole releases had the longest LOS by far, and average of 417 days, up from 385 days in 2001. There were no significant differences when comparing 2001 and 2002 release figures.

#### D. Legal Status Flow and Jail Movement

Table 12 details the flow of inmates through the jail system from admission through sentencing and relates the average length of stay for each legal status. Pretrial new charge felons and felony probation violators averaged the longest pre and post sentence lengths of stay. This trend is consistent with national criminal justice systems. The majority of inmates enter the Davidson county jail system as pretrial misdemeanants (almost 58%). This group averages 11.7 days before sentencing, 37% of which serve an average of 19 days before release. 63% of these pretrial misdemeanants are released without sentencing after an average of 1.8 days.

Table 12 exhibits pretrial felons that become locally sentenced spend an average of 88.9 days in jail before being sentenced. Offenders sentenced to TDOC spend an average of 268 days before being sentenced and transferred to TDOC. Pretrial felons who are either sentenced to a misdemeanor or released pre-trial move through the pretrial process much faster; spending an average of 3-16 days in jail before being sentenced. Pretrial misdemeanants move through the system at an average of 11.7 days before being sentenced.

Table 13 gives a cross tab of the jail flow from admitted legal status to released legal status. Of these offenders, 36.4% are admitted as pretrial misdemeanants and are released un-sentenced. 72% of pretrial felony cases (6,190 inmates in 2002) were released without a sentence due to the majority being released on bond/pretrial.

No admitted legal statuses showed significant change when compared to their legal status at release with the exception of felony probation violators. The majority of the admitted felony probation violators had their original sentence put into effect serving an additional average of 181 days.

TABLE 9

DAVIDSON COUNTY CURRENT JAIL POPULATION MOST SERIOUS CHARGE - JANUARY 15, 2003.

| CHARACTERISTICS         | N     | %     | 31-May-2001<br>% | CHARACTERISTICS                | N     | %     | 31-May-<br>2001<br>% |
|-------------------------|-------|-------|------------------|--------------------------------|-------|-------|----------------------|
| Total Number of Inmates | 2,899 | 100.0 | 100.0            | Total Number of Inmates        | 2,899 | 100.0 | 100.0                |
| Gender                  |       |       |                  | Legal Status                   |       |       |                      |
| Male                    | 2,550 | 88.0  | 86.5             | State Inmates                  | 1,098 | 37.9  | 36.1                 |
| Female                  | 349   | 12.0  | 13.5             | Sentenced Felons TDOC          | 24    | 0.8   | 1.0                  |
| Race & Ethnicity        |       |       |                  | Sentenced Felons Local         | 1,074 | 37.0  | 35.1                 |
| Anglo/Caucasian         | 1,091 | 37.6  | 40.0             | Local Inmates                  | 1,801 | 62.1  | 63.9                 |
| Black                   | 1,803 | 62.2  | 59.7             | Convicted DUI                  | 78    | 2.7   | 6.7                  |
| Hispanic                | 0     | 0.0   | 0.1              | Sentenced Misdemeanants        | 401   | 13.8  | 17.2                 |
| Asian                   | 1     | 0.0   | 0.0              | Pretrial Felons/ Misdemeanants | 1,076 | 37.1  | 36.2                 |
| Indian/Alaskan          | 0     | 0.0   | 0.0              | Other                          | 46    | 1.6   | 3.1                  |
| Unknown                 | 4     | 0.1   | 0.2              | Federal Inmates                | 24    | 8.0   | 0.7                  |
| Age at Admission        |       |       |                  | Probation Violators            | 176   | 6.1   | n/a                  |
| 20 and under            | 371   | 12.8  | 5.0              |                                |       |       |                      |
| 21 to 30                | 1,041 | 35.9  | 42.1             | Facility                       |       |       |                      |
| 31 to 40                | 799   | 27.6  | 32.8             | Criminal Justice Center        | 683   | 23.5  | 25.0                 |
| 40 and above            | 685   | 23.6  | 19.8             | Correctional Work Center       | 567   | 19.6  | 19.8                 |
| Missing                 | 3     | 0.1   | 0.2              | Hill Detention Center          | 459   | 15.8  | 11.0                 |
| Mean Age                | 32.4  | years | 32.0 years       | Metro Detention Center         | 1,190 | 41.0  | 44.2                 |
| Security Level          |       |       |                  |                                |       |       |                      |
| Minimum                 | 999   | 34.5  | 33.1             |                                |       |       |                      |
| Medium                  | 1047  | 36.1  | 29.9             |                                |       |       |                      |
| Maximum                 | 493   | 17.0  | 14.6             |                                |       |       |                      |
| None                    | 1     | 0.0   | 22.3             |                                |       |       |                      |
| Missing                 | 359   | 12.4  | 0.2              |                                |       |       |                      |

Source: Davidson County Sheriff's Office Jail Management System. A snapshot extract file was taken of inmates present in the jail system on January 15, 2003. Results from a snapshot extract file taken on May 31, 2001 were used for comparison.

TABLE 10
DAVIDSON COUNTY JAIL CURRENT JAIL POPULATION
MOST SERIOUS CHARGE – JANUARY 15, 2003

| Most Serious Charge                          | N     | %    | May 31, 2001 |
|--|-------|------|--------------|
| Violent Crimes                               | 764   | 26%  | 30%          |
| Homicide                                     | 147   | 5%   | 4%           |
| Sex Crimes                                   | 73    | 3%   | 3%           |
| Robbery                                      | 182   | 6%   | 7%           |
| Assaults                                     | 271   | 9%   | n/a          |
| All Other Violent Crimes                     | 91    | 3%   | 17%          |
| Drug Crimes                                  | 351   | 12%  | 22%          |
| Drug Sales/Intent                            | 260   | 9%   | 17%          |
| Drug Possession                              | 91    | 3%   | 4%           |
| Non-Violent Crimes Property                  | 382   | 13%  | 18%          |
| Burglary                                     | 164   | 6%   | 6%           |
| Theft/Larceny                                | 193   | 7%   | 10%          |
| Fraud/Forgery                                | 25    | 1%   | 2%           |
| Non-Violent Crimes Other                     | 1,375 | 47%  | 31%          |
| Escape                                       | 14    | 1%   | 1%           |
| Crimes Against the Courts and Government (a) | 1,150 | 40%  | n/a          |
| Other  | 211   | 7%   | 30%          |
| Missing                                      | 27    | 1%   | 0%           |
| Total  | 2,899 | 100% | 100%         |

Note: % totals may not equal 100% due to rounding.

Source: Davidson County Sheriff's Office Jail Management System. A snapshot extract file was taken of inmates present in the jail system on January 15, 2003. Results from a snapshot extract file taken on May 31, 2001 were used for comparison.

<sup>(</sup>a) Crimes Against the Courts and Government are primarily Probation Violations, Parole Violations, Capias Misdemeanors, Capias Felonies, Contempt of Court, Fail to Appear, and Fail to be Booked.

TABLE 11
DAVIDSON COUNTY JAIL RELEASES BY METHOD OF RELEASE,
AND LENGTH OF STAY IN DAYS 2002

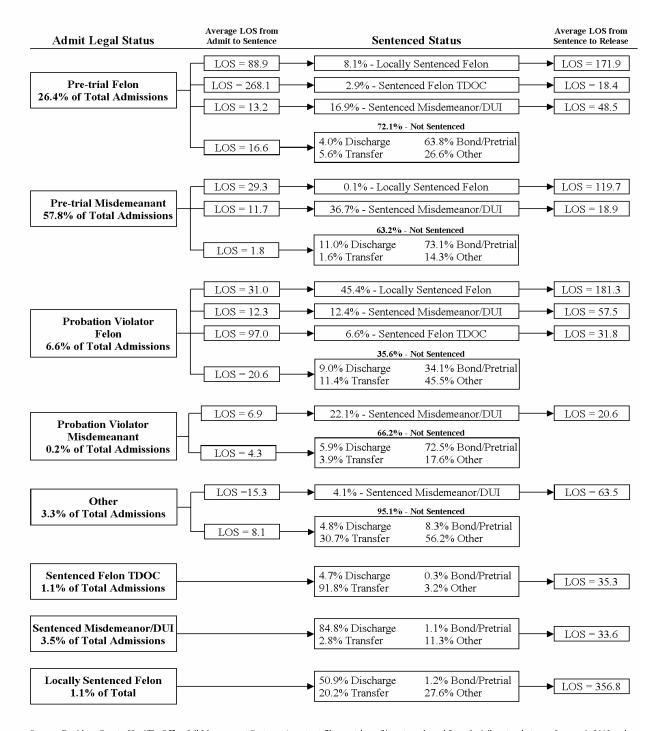
| Method of Release             | Releases | LOS in Days | Beds per Year |
|-------------------------------|----------|-------------|---------------|
| Sentence Completed            | 10,972   | 53.8        | 1,615         |
| Probation                     | 2,887    | 73.6        | 582           |
| Transfer to Another Authority | 2,426    | 82.2        | 546           |
| Paroled                       | 137      | 416.5       | 156           |
| Audit                         | 515      | 72.5        | 102           |
| Bond Out                      | 8,313    | 4.2         | 97            |
| Charges Dismissed             | 1,092    | 15.4        | 46            |
| Retired/Not Prosecuted        | 517      | 21.3        | 30            |
| Other Release                 | 214      | 40.2        | 24            |
| Promise to Pay a Fine         | 405      | 16.1        | 18            |
| Pre-Trial Release             | 4,912    | 0.6         | 8             |
| Weekender                     | 104      | 11.5        | 3             |
| Not Guilty                    | 9        | 74.4        | 2             |
| Total                         | 32,503   | 36.3        | 3,229         |

LOS = Length of Stay

Note: Audit refers to booking errors and issues not covered by other codes. Audit can also refer to situations where inmates were released from Metro Detention Facility but not released from the Jail Management System at the proper time.

Source: Davidson County Sheriff's Office Jail Management System. An extract file was taken of inmates released from the jail system from January 1, 2002 through December 31, 2002.

Table 12 2002 Davidson County Jail Movement



Source: Davidson County Sheriff's Office Jail Management System. An extract file was taken of inmates released from the jail system between January 1, 2002 and December 31, 2002.

Note: This chart does not depict status movements that occurred less than 10 times .

Table 13
Admit Legal Status by Final Legal Status

|  | Final Legal Status          |                               |                            |                    |                               |                                |   |                   |                         |
|--|-----------------------------|-------------------------------|----------------------------|--------------------|-------------------------------|--------------------------------|---|-------------------|-------------------------|
| Admit Legal Status   | Local<br>Sentenced<br>Felon | Sentenced<br>Misdemean<br>ant | Sentenced<br>Felon<br>TDOC | Pre-Trial<br>Felon | Pre-Trial<br>Misdemean<br>ant | Probation<br>Violator<br>Felon | Probation<br>Violator<br>Misdemean<br>ant | Other             | Total                   |
| Local Sentenced Felon Count % within Legal Status % of Total               | 265                         | 39                            | 18                         | 1                  | 0                             | 0                              | 0   | 23                | 346                     |
|  | 76.6%                       | 11.3%                         | 5.2%                       | 0.3%               | 0.0%                          | 0.0%                           | 0.0%                                      | 6.6%              | 100.0%                  |
|  | 0.8%                        | 0.1%                          | 0.1%                       | 0.0%               | 0.0%                          | 0.0%                           | 0.0%                                      | 0.1%              | 1.1%                    |
| Sentenced Felon - TDOC Count % within Legal Status % of Total              | 12                          | 74                            | 256                        | 0                  | 1                             | 0                              | 0   | 2                 | 345                     |
|  | 3.5%                        | 21.4%                         | 74.2%                      | 0.0%               | 0.3%                          | 0.0%                           | 0.0%                                      | 0.6%              | 100.0%                  |
|  | 0.0%                        | 0.2%                          | 0.8%                       | 0.0%               | 0.0%                          | 0.0%                           | 0.0%                                      | 0.0%              | 1.1%                    |
| Sentenced Misdemeanant Count % within Legal Status % of Total              | 21                          | 1,100                         | 0                          | 0                  | 0                             | 0                              | 0   | 21                | 1,142                   |
|  | 1.8%                        | 96.3%                         | 0.0%                       | 0.0%               | 0.0%                          | 0.0%                           | 0.0%                                      | 1.8%              | 100.0%                  |
|  | 0.1%                        | 3.4%                          | 0.0%                       | 0.0%               | 0.0%                          | 0.0%                           | 0.0%                                      | 0.1%              | 3.5%                    |
| Pre-Trial Felon Count % within Legal Status % of Total                     | 698                         | 1,450                         | 247                        | 6,190              | 1                             | 0                              | 0   | 11                | 8,597                   |
|  | 8.1%                        | 16.9%                         | 2.9%                       | 72.0%              | 0.0%                          | 0.0%                           | 0.0%                                      | 0.1%              | 100.0%                  |
|  | 2.1%                        | 4.5%                          | 0.8%                       | 19.0%              | 0.0%                          | 0.0%                           | 0.0%                                      | 0.0%              | 26.4%                   |
| Pre-Trial Misdemeanant Count % within Legal Status % of Total              | 24                          | 6,886                         | 1                          | 0                  | 11,818                        | 0                              | 0   | 57                | 18,786                  |
|  | 0.1%                        | 36.7%                         | 0.0%                       | 0.0%               | 62.9%                         | 0.0%                           | 0.0%                                      | 0.3%              | 100.0%                  |
|  | 0.1%                        | 21.2%                         | 0.0%                       | 0.0%               | 36.4%                         | 0.0%                           | 0.0%                                      | 0.2%              | 57.8%                   |
| Probation Violator - Felon<br>Count<br>% within Legal Status<br>% of Total | 975<br>45.4%<br>3.0%        | 266<br>12.4%<br>0.8%          | 141<br>6.6%<br>0.4%        | 0<br>0.0%<br>0.0%  | 0<br>0.0%<br>0.0%             | 762<br>35.5%<br>2.3%           | 0<br>0.0%<br>0.0%                         | 3<br>0.1%<br>0.0% | 2,147<br>100.0%<br>6.6% |
| Probation Violator - Misdemeanant Count % within Legal Status % of Total   | 8                           | 17                            | 1                          | 0                  | 0                             | 0                              | 51  | 0                 | 77                      |
|  | 10.4%                       | 22.1%                         | 1.3%                       | 0.0%               | 0.0%                          | 0.0%                           | 66.2%                                     | 0.0%              | 100.0%                  |
|  | 0.0%                        | 0.1%                          | 0.0%                       | 0.0%               | 0.0%                          | 0.0%                           | 0.2%                                      | 0.0%              | 0.2%                    |
| Other Count % within Legal Status % of Total                               | 6                           | 44                            | 2                          | 0                  | 0                             | 0                              | 0   | 1,011             | 1,063                   |
|  | 0.6%                        | 4.1%                          | 0.2%                       | 0.0%               | 0.0%                          | 0.0%                           | 0.0%                                      | 95.1%             | 100.0%                  |
|  | 0.0%                        | 0.1%                          | 0.0%                       | 0.0%               | 0.0%                          | 0.0%                           | 0.0%                                      | 3.1%              | 3.3%                    |
| Total Count % of Total   | 2,009                       | 9,876                         | 666                        | 6,191              | 11,820                        | 762                            | 51  | 1,128             | 32,503                  |
|  | 6.2%                        | 30.4%                         | 2.0%                       | 19.0%              | 36.4%                         | 2.3%                           | 0.2%                                      | 3.5%              | 100.0%                  |

Source: Davidson County Sheriff's Office Jail Management System. An extract file was taken of inmates released from the jail system from January 1, 2002 through December 31, 2002.

#### VI. POPULATION PROJECTION ASSUMPTIONS

The inmate population projections contained in this report were completed using the Wizard 2000 simulation model. This model simulates the movements of inmates through the court system based on known and assumed policies affecting both the volume of admissions into the system and the lengths of stay for inmates who are housed in jail. It simulates the movements of individual cases, by legal status, and projects each separately. Inmates sentenced under different sentencing policies, move through the system differently. We have made the following key assumptions that have a significant impact on the projection results.

- A. Three projections were done for this report. Each one uses different assumptions to calculate volume of admissions into the jail system. Admissions were varied according to the degree of weight given to two factors: demographic projections for the male at-risk population and the current adult arrest trends. As discussed above, the population at-risk for arrest in Davidson County is projected to flatten out in the future, while adult arrests have increased in recent years.
  - 1) Low Projection Future admissions to the jail will increase at a rate of 1.0 % per year. More weight was given to the flatter demographic projections.
  - 2) Baseline Projection Future admissions to the jail will increase at a rate of 1.9% per year. Demographic and arrest factors were weighted equally in this projection.
  - 3) High Projection Future admissions to the jail will increase at a rate of 2.8% per year. More weight was given to the increasing arrest practices.
- B. The sentenced and un-sentenced group composition of future annual new commitments is assumed to be the same as the composition of admissions during 2002.
- C. Sentencing and pretrial release rates will remain at the levels reported in 2002.
- D. Average length of stay statistics will remain at the levels reported in 2002.

#### VII. JAIL POPULATION PROJECTION

This section contains the jail inmate population projections based on the assumptions set forth above.

#### A. Projected Inmate Average Daily Population

Figure 4 displays the historical and projected inmate average daily population for the period 1996 to 2012. The graph shows the Low, Baseline, and High projections using the corresponding model assumptions. The forecasts are also presented in table form in Appendix 2 of this document.

1. In 2012, the Baseline projection estimates that 3,836 inmates will be housed in the Davidson County jail system on an average day. The Low estimate is 3,409

inmates and the High estimate is 4,146 inmates average daily population in 2012.

- 2. The average daily population in 2002 was 2,941.
  - a) The Low estimate projects 3,032 inmates in 2003, 3,327 inmates in 2007, and 3,409 inmates in 2012: representing an increase of 42 inmates per year or 1.3% average increase.
  - b) The Baseline population is projected to increase to 3,087 inmates in 2003, to 3,480 in 2007, and to 3,836 inmates in 2012. The projected growth represents average annual increases of 83 inmates per year or 2.4%% per year through the year 2012.
  - c) Using the High estimate, the population is projected to increase to 3,126 inmates in 2003, to 3,675 in 2007, and to 4,146 in 2012; representing an increase of 113 inmates per year or 3.2% average annual increase.

# B. Table 14 displays the projected jail population by legal status for the period 2003 through 2012.

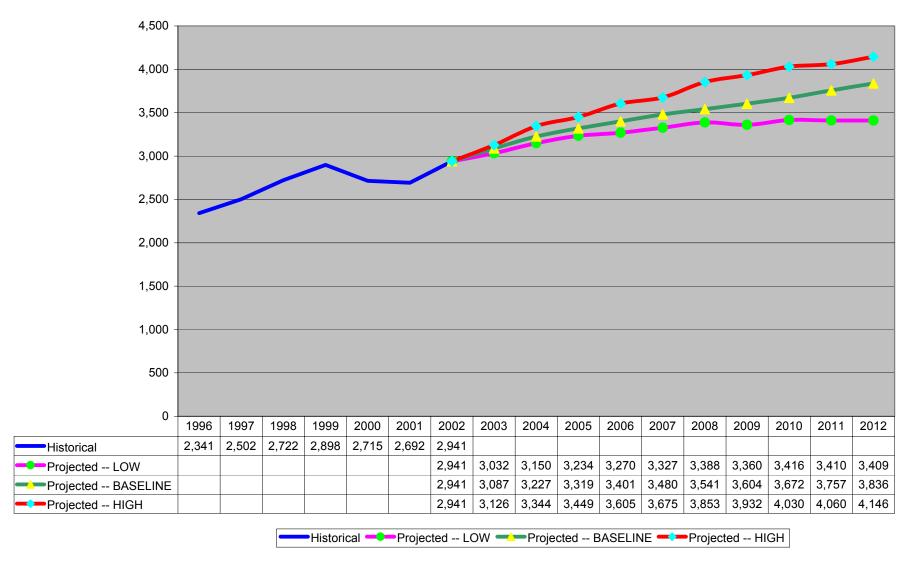
#### 1. Felons

State (TDOC) sentenced felons are expected to increase at the highest rate of any legal status group -- from a Baseline average daily population of 29 in 2003 to 55 per day in 2012 (Low: 52 in 2012; High: 63 in 2012). This represents and average annual increase of 7.8% from 2003 to 2012 (Low: 7.9%; High: 8.3%). Locally sentenced felons are expected to grow from an average of 1,186 in 2003 to 1,435 in 2012 – representing an average annual increase of 2.1%. The High projection indicates that this group will increase 2.8% annually to an average daily population of 1,526 in 2012.

2. Other Local Inmates (Pretrial felons and misdemeanors, sentenced misdemeanors, sentenced DUI's, Probation Violators, and Others):

The category that contains Probation Violators and Others are projected to grow at the fastest clip, at 2.9% average annual percentage increase through 2012. Pretrial inmates follow closely behind, growing from 1,133 to 1,444 inmates (27% average annual increase) on an average day. The Baseline projection shows a relatively slow growth for Sentenced Misdemeanors and DUI's from 2003 through 2012. That group is projected to grow at an annual average of 2.0%, increasing from an average of 500 inmates a day in 2003 to 595 inmates in 2012.

Figure 4: Davidson County Jail Population Historical and Projected



Source: Criminal Justice Planning Unit, of Nashville and Davidson County

TABLE 14
DAVIDSON COUNTY JAIL POPULATION PROJECTIONS BY LEGAL STATUS
2003 - 2012

|                               | Locally Sentenced Felons |          |       |
|-------------------------------|--------------------------|----------|-------|
| Year                          | Low                      | Baseline | High  |
| 2002*                         |                          | 1,118    |       |
| 2003                          | 1,172                    | 1,186    | 1,189 |
| 2004                          | 1,195                    | 1,228    | 1,272 |
| 2005                          | 1,215                    | 1,237    | 1,296 |
| 2006                          | 1,234                    | 1,278    | 1,369 |
| 2007                          | 1,241                    | 1,303    | 1,360 |
| 2008                          | 1,281                    | 1,327    | 1,445 |
| 2009                          | 1,248                    | 1,323    | 1,462 |
| 2010                          | 1,255                    | 1,352    | 1,475 |
| 2011                          | 1,279                    | 1,375    | 1,511 |
| 2012                          | 1,258                    | 1,435    | 1,526 |
| Average<br>Annual %<br>Change | 0.8%                     | 2.1%     | 2.8%  |

| State Sentenced Felons |                   |      |  |
|------------------------|-------------------|------|--|
| Low                    | Low Baseline High |      |  |
|                        | 40                |      |  |
| 28                     | 29                | 32   |  |
| 40                     | 40                | 44   |  |
| 45                     | 45                | 49   |  |
| 49                     | 51                | 53   |  |
| 50                     | 53                | 54   |  |
| 49                     | 51                | 54   |  |
| 48                     | 50                | 57   |  |
| 48                     | 51                | 59   |  |
| 51                     | 56                | 62   |  |
| 52                     | 55                | 63   |  |
|                        |                   |      |  |
| 7.9%                   | 7.8%              | 8.3% |  |

| Pretrial          |       |       |  |  |
|-------------------|-------|-------|--|--|
| Low Baseline High |       |       |  |  |
|                   | 955   |       |  |  |
| 1,109             | 1,133 | 1,152 |  |  |
| 1,185             | 1,209 | 1,240 |  |  |
| 1,207             | 1,244 | 1,295 |  |  |
| 1,226             | 1,267 | 1,331 |  |  |
| 1,255             | 1,296 | 1,384 |  |  |
| 1,255             | 1,326 | 1,444 |  |  |
| 1,269             | 1,373 | 1,475 |  |  |
| 1,308             | 1,381 | 1,533 |  |  |
| 1,270             | 1,430 | 1,521 |  |  |
| 1,284             | 1,444 | 1,564 |  |  |
|                   |       |       |  |  |
| 1.7%              | 2.7%  | 3.5%  |  |  |

|                               | Sentenced Misdemeanors / DUI |          |      |
|-------------------------------|------------------------------|----------|------|
| Year                          | Low                          | Baseline | High |
| 2002*                         |                              | 552      |      |
| 2003                          | 499                          | 500      | 514  |
| 2004                          | 486                          | 495      | 520  |
| 2005                          | 512                          | 526      | 540  |
| 2006                          | 504                          | 537      | 562  |
| 2007                          | 520                          | 540      | 583  |
| 2008                          | 533                          | 560      | 616  |
| 2009                          | 524                          | 579      | 618  |
| 2010                          | 538                          | 592      | 635  |
| 2011                          | 538                          | 595      | 647  |
| 2012                          | 533                          | 595      | 663  |
| Average<br>Annual %<br>Change | 0.8%                         | 2.0%     | 2.9% |

| Probation Violators & Others |               |      |  |
|------------------------------|---------------|------|--|
| Low                          | Baseline High |      |  |
|                              | 278           |      |  |
| 224                          | 238           | 240  |  |
| 245                          | 256           | 268  |  |
| 256                          | 267           | 269  |  |
| 258                          | 269           | 290  |  |
| 261                          | 287           | 294  |  |
| 270                          | 277           | 295  |  |
| 272                          | 279           | 321  |  |
| 267                          | 296           | 328  |  |
| 272                          | 300           | 319  |  |
| 281                          | 307           | 331  |  |
|                              |               |      |  |
| 2.6%                         | 2.9%          | 3.7% |  |

| Total |          |       |  |  |
|-------|----------|-------|--|--|
| Low   | Baseline | High  |  |  |
|       | 2,941    |       |  |  |
| 3,032 | 3,087    | 3,126 |  |  |
| 3,150 | 3,227    | 3,344 |  |  |
| 3,234 | 3,319    | 3,449 |  |  |
| 3,270 | 3,401    | 3,605 |  |  |
| 3,327 | 3,480    | 3,675 |  |  |
| 3,388 | 3,541    | 3,853 |  |  |
| 3,360 | 3,604    | 3,932 |  |  |
| 3,416 | 3,672    | 4,030 |  |  |
| 3,410 | 3,757    | 4,060 |  |  |
| 3,409 | 3,836    | 4,146 |  |  |
|       |          |       |  |  |
| 1.3%  | 2.4%     | 3.2%  |  |  |

Source: Criminal Justice Planning Unit, of Nashville and Davidson County

<sup>\*</sup>Actual ADP

# APPENDIX 1 PART I CRIMINAL OFFENSES REPORTED TO METROPOLITAN NASHVILLE POLICE DEPARTMENT 1963 - 2002

|                          |                 | Annual  |         | Annual  |          | Annual  |
|--------------------------|-----------------|---------|---------|---------|----------|---------|
|                          | Part I Crimes   | Percent | Violent | Percent | Property | Percent |
| Year                     | Total           | Change  | Crimes  | Change  | Crimes   | Change  |
| 1963                     | 12,250          |         | 621     |         | 11,629   |         |
| 1964                     | 12,184          | -0.5%   | 772     | 24.3%   | 11,412   | -1.9%   |
| 1965                     | 10,895          | -10.6%  | 1,200   | 55.4%   | 9,695    | -15.0%  |
| 1966                     | 15,258          | 40.0%   | 1,630   | 35.8%   | 13,628   | 40.6%   |
| 1967                     | 21,218          | 39.1%   | 3,814   | 134.0%  | 17,404   | 27.7%   |
| 1968                     | 21,346          | 0.6%    | 3,569   | -6.4%   | 17,777   | 2.1%    |
| 1969                     | 20,394          | -4.5%   | 2,347   | -34.2%  | 18,047   | 1.5%    |
| 1970                     | 20,817          | 2.1%    | 2,999   | 27.8%   | 17,818   | -1.3%   |
| 1971                     | 25,359          | 21.8%   | 3,615   | 20.5%   | 21,744   | 22.0%   |
| 1972                     | 21,012          | -17.1%  | 2,885   | -20.2%  | 18,127   | -16.6%  |
| 1973                     | 24,675          | 17.4%   | 2,845   | -1.4%   | 21,830   | 20.4%   |
| 1974                     | 26,852          | 8.8%    | 2,813   | -1.1%   | 24,039   | 10.1%   |
| 1975                     | 32,828          | 22.3%   | 3,158   | 12.3%   | 29,670   | 23.4%   |
| 1976                     | 29,749          | -9.4%   | 2,834   | -10.3%  | 26,915   | -9.3%   |
| 1977                     | 26,094          | -12.3%  | 2,955   | 4.3%    | 23,139   | -14.0%  |
| 1978                     | 26,444          | 1.3%    | 3,153   | 6.7%    | 23,291   | 0.7%    |
| 1979                     | 28,612          | 8.2%    | 3,251   | 3.1%    | 25,361   | 8.9%    |
| 1980                     | 34,888          | 21.9%   | 3,636   | 11.8%   | 31,252   | 23.2%   |
| 1981                     | 33,617          | -3.6%   | 3,100   | -14.7%  | 30,517   | -2.4%   |
| 1982                     | 35,206          | 4.7%    | 3,248   | 4.8%    | 31,958   | 4.7%    |
| 1983                     | 31,213          | -11.3%  | 3,289   | 1.3%    | 27,924   | -12.6%  |
| 1984                     | 31,126          | -0.3%   | 3,105   | -5.6%   | 28,021   | 0.3%    |
| 1985                     | 31,864          | 2.4%    | 3,377   | 8.8%    | 28,487   | 1.7%    |
| 1986                     | 38,242          | 20.0%   | 4,219   | 24.9%   | 34,023   | 19.4%   |
| 1987                     | 43,134          | 12.8%   | 5,272   | 25.0%   | 37,862   | 11.3%   |
| 1988                     | 37,188          | -13.8%  | 5,293   | 0.4%    | 31,895   | -15.8%  |
| 1989                     | 34,908          | -6.1%   | 5,238   | -1.0%   | 29,670   | -7.0%   |
| 1990                     | 39,364          | 12.8%   | 6,885   | 31.4%   | 32,479   | 9.5%    |
| 1991                     | 43,959          | 11.7%   | 7,990   | 16.0%   | 35,969   | 10.7%   |
| 1992                     | 49,863          | 13.4%   | 8,381   | 4.9%    | 41,482   | 15.3%   |
| 1993                     | 55,498          | 11.3%   | 9,162   | 9.3%    | 46,336   | 11.7%   |
| 1994                     | 52,469          | -5.5%   | 9,375   | 2.3%    | 43,094   | -7.0%   |
| 1995                     | 56,090          | 6.9%    | 9,376   | 0.0%    | 46,714   | 8.4%    |
| 1996                     | 59,533          | 6.1%    | 10,023  | 6.9%    | 49,510   | 6.0%    |
| 1997                     | 58,996          | -0.9%   | 9,291   | -7.3%   | 49,705   | 0.4%    |
| 1998                     | 53,255          | -9.7%   | 8,554   | -7.9%   | 44,701   | -10.1%  |
| 1999                     | 46,457          | -12.8%  | 8,406   | -1.7%   | 38,051   | -14.9%  |
| 2000                     | 49,791          | 7.2%    | 9,217   | 9.6%    | 40,574   | 6.6%    |
| 2001                     | 51,343          | 3.1%    | 9,220   | 0.0%    | 42,123   | 3.8%    |
| 2002                     | 47,904          | -6.7%   | 8,799   | -4.6%   | 38,105   | -9.5%   |
| Percent Change 1         | 963-1989        | 5.2%    |         | 11.8%   |          | 4.7%    |
| Percent Change 1990-1996 |                 | 8.1%    |         | 10.1%   |          | 7.8%    |
| Percent Change 1         | 997-2002        | -3.3%   |         | -2.0%   |          | -3.9%   |
| Overall Percent C        | hange 1963-2002 | 4.4%    |         | 9.4%    |          | 3.9%    |

Note: Part I criminal offenses are homicide, rape, aggravated assault, robbery, burglary, larceny, and vehicle theft.

Source: Metropolitan Nashville Police Department, 2002 Annual Crime Analysis Report.

# APPENDIX 2 DAVIDSON COUNTY JAIL SYSTEM HISTORICAL AND PROJECTED INMATE POPULATION 1996-2012

|                |            | Projected | Projected | Projected |
|----------------|------------|-----------|-----------|-----------|
| Year           | Historical | LOW       | BASELINE  | HIGH      |
| 1996           | 2,341      |           |           |           |
| 1997           | 2,502      |           |           |           |
| 1998           | 2,722      |           |           |           |
| 1999           | 2,898      |           |           |           |
| 2000           | 2,715      |           |           |           |
| 2001           | 2,692      |           |           |           |
| 2002           | 2,941      |           |           |           |
| 2003           |            | 3,032     | 3,087     | 3,126     |
| 2004           |            | 3,150     | 3,227     | 3,344     |
| 2005           |            | 3,234     | 3,319     | 3,449     |
| 2006           |            | 3,270     | 3,401     | 3,605     |
| 2007           |            | 3,327     | 3,480     | 3,675     |
| 2008           |            | 3,388     | 3,541     | 3,853     |
| 2009           |            | 3,360     | 3,604     | 3,932     |
| 2010           |            | 3,416     | 3,672     | 4,030     |
| 2011           |            | 3,410     | 3,757     | 4,060     |
| 2012           |            | 3,409     | 3,836     | 4,146     |
| Average Annual |            |           |           |           |
| Numeric Change |            |           |           |           |
| 1996 – 2002    | 100        |           |           |           |
| Average Annual |            |           |           |           |
| Percent Change |            |           |           |           |
| 1996 – 2002    | 4.0%       |           |           |           |
| Average Annual |            |           |           |           |
| Numeric Change |            |           |           |           |
| 2003 – 2012    |            | 42        | 83        | 113       |
| Average Annual |            |           |           |           |
| Percent Change |            | 4.00/     | 0.404     | 2.22/     |
| 2003 – 2012    |            | 1.3%      | 2.4%      | 3.2%      |

Source: Criminal Justice Planning Unit, of Nashville and Davidson County

#### JAIL MANAGEMENT INFORMATION SYSTEM

#### A. Database Summary

Two separate database systems comprise the overall offender information system for Davidson County. The Metropolitan Nashville Police Department maintains a mainframe database system containing arrest information on each offender booked into their facility. The Davidson County Sheriff's Office maintains an Oracle-based jail management system (JMS) developed by Unisys.

#### 1. Metropolitan Nashville Police Department's Database System

The MNPD's Database System is a mainframe application containing arrest information for each offender entering their system. The information in the database is maintained on a "per-incident" basis, with each incident having a unique arrest number. While a single incident can have multiple charges assigned to it, if multiple people are arrested related to the same incident, each arrestee (OCA) will be assigned a different arrest number. In this manner, each arrest number is unique for a particular incident/arrest/OCA. Included in the database are tables containing the following data:

- Personal and demographic information
- Charge information
- Alias information

#### 2. Davidson County Sheriff's Office Jail Management System

The Davidson County Jail Management System (JMS) is an object-based client/server application designed and developed by Unisys. The application uses an Oracle database with a PowerBuilder client. The front-end client operates as a true 32-bit Microsoft Windows application developed under PowerBuilder. The back end" or database layer of the application resides on the system server and is implemented using Oracle's PL/SQL. This allows the system to provide open access via industry standard SQL queries.

The Davidson County JMS maintains an extensive set of information on each inmate's current incarceration. Included are tables containing the following data:

- Personal and demographic information
- Admission information
- Release information
- Charge information
- Sentence information
- Classification information

In addition to current information, the JMS database also provides a limited amount of historical information for the current and previous incarcerations. Included are tables containing the following data:

- Charge history
- Classification history

#### 3. Flow of Information

Although MNPD and DCSO maintain their own database systems, there is a flow of information from one to the other. When an offender is first brought into the jail, an initial booking is performed. The name and all available arrest information is entered at this time. This data is saved to the mainframe database and an initial arrest record "created" in the Sheriff's JMS. Communication between the two systems is handled automatically via FTP and an export/import mechanism. Since the offender has not yet been brought before the commissioner, charge information is not included in this initial arrest record. In a separate process, this initial arrest information is simultaneously being entered into the court's Criminal Justice Information System (CJIS).

If the commissioner upholds the offender's charges, final booking is performed. The offender is fingerprinted to confirm his identity and the correct OCA number assigned. Final arrest information is then entered into the mainframe system. Once this final arrest information is saved to the database, three new records are sent to the JMS. These records contain demographic, alias and warrant (charge) information. If for any reason information not included in these final arrest records is required by the JMS, the OCA number can be used to link back MNPD's mainframe database.

#### **METHODOLOGY**

The second, update report used the same methodology and resources as the first report. Data was collected at both the aggregate system level and individual level. In order to complete the forecasting model the following information was collected: County demographic trends, arrest trends, pretrial release data, and jail population trends. In addition, individual level data on inmate and their associated charges were collected from the Davidson County Jail Management System. Dates used were Jan 1, 2002 – Dec 31, 2002, for all admissions and releases. Additionally a snapshot, referred to the 'Stock Population', was taken on Jan 15, 2002, which shows inmate demographic and charge data.

The Wizard 2000 Simulation model is an example of a stochastic entity simulation model. It is stochastic in the sense that the model is conceptually designed around the movement of individual cases (offenders) into, through, and out of correctional populations defined by the user. The model also makes use of the Monte Carlo simulation techniques by adding an element of randomness to the simulation model. Random numbers are generated and used by the simulation process to determine the offender group composition and lengths of stay associated with a system. Individual cases are processed by the model through a series of probability distribution arrays or matrices that provide computations for 34 specific cases. When loaded with accurate data, the model will mimic the flow of offenders through a correctional system.

The forecasted populations are composed of: <sup>1)</sup> cases confined at the beginning of the simulation, and <sup>2)</sup> cases admitted to the population at any point after the start of the simulation. The existing offender population and new offender admissions are modeled separately. By disaggregating a system in this manner, the user can adjust each of these sub-populations without altering the process of other sub-groups. This is particularly significant for completing Awhat-if simulations on the forecasted population.

In order to understand the process, it is useful to briefly discuss the output of the model. The Wizard 2000 Simulation model produces two types of projections. First, it produces offender population projections, such as the incarcerated prison, jail, or community program populations. These outputs are usually of primary importance. However, the model also projects movements into and out of various statuses and produces admission and release projections. The computer program produces these outputs in the form of vectors that represent a ten-year time span.

The process can be described as follows: First, the existing jail and supervised release population are decremented. This is done for several populations in a multi-step process. For example, the existing population members are each assigned to an offense group using Monte Carlo techniques. For each member of the offense groups, a time remaining to be served is computed. Through this process, the time in prison is calculated for each inmate and the presence of each offender is marked on the jail trace vector. When an inmate exits jail to supervised release, for example, a mark is made on the jail supervised release movement trace vector. The offenders may recycle back through jail again, eventually exiting the system or exceeding the maximum length of the projection. At each stage of the offenders progress and for each movement, appropriate trace vectors are updated. A similar process is used for the existing supervised release populations and for the new intake populations. The result is a set of fully updated trace vectors that comprise the population

and movement projections. The movements and outputs are especially useful in terms of monitoring how well the model is replicating the actual flow of cases through the system.

The basic building blocks of the model are the following three items: id groups, statuses, and flows. Id groups can be described as case identifiers or offender groups that are meaningful within the context of the local jurisdictions record keeping system and are similar to the way in which cases are processed through the corrections system (i.e., male offenders, female offenders, etc.). Statuses can be described as stages or conditions associated with the operation of the system (i.e., Pre-trial, Sentenced Misdemeanant, etc.). Flows can be described as connections between statuses, which represent the paths or flows a case could take through the system, and the length of stay (or lag) in each status (i.e., Pretrial to Convictions, Detention to Release).

The basic building blocks, id groups, statuses, movements and other features such as sentencing, earned credits, minimum thresholds for time served, comprise a set of attributes tailored to the specific needs of decision makers. The identification of important sub-groups will be made jointly by team analysts and local officials to ensure that necessary data are collected and that final projections provide the level of detail necessary to finalize housing plans.

#### **Data Requirements for Davidson County Simulation Model**

**Admissions File:** This file should contain one record of data for every individual that was admitted/booked into the Davidson County Jail for the specified time period. This file should contain the following variables for each offender. Since some offenders are booked multiple times through the course of a few months, this file may contain multiple records per offender.

|                              | Definition   |
|------------------------------|--|
| CMIS number                  | Unique offender/incarceration identifier   |
| Offender Number              | Unique offender identifier   |
| Gender                       | Sex of offender  |
| Race                         | Race of offender   |
| Date of birth                | Date of Birth of offender  |
| County of residence          | This field is optional   |
| Education level              | This field is optional   |
| Marital Status               | This field is optional   |
| Prior Convictions            | Number of prior convictions  |
| Drug/alcohol abuse           | Variable summarizing drug and alcohol abuse history  |
| Employment Status            | This field is optional   |
| Offense Code                 | This field should represent the most serious offense the offender was admitted for even if it is not his/her current most serious charge. MIS established hierarchy of offenses should be utilized.  |
| Offense Code Type (F/M)      | Felony or Misdemeanor indication of most serious charge  |
| Admission/Booking Date       | This field should represent the day on which the offender was brought into the Davidson County Jail  |
| Admission/Booking Time       | Corresponding 24 clock time for admission date   |
| Legal Status at Admission    | This field should indicate the legal status the offender was in at THE TIME OF ADMISSIONS. This should not reflect what the inmate's legal status is currently or what he/she was released under. The legal statuses are: pre-trial, sentenced DUI, sentenced misdemeanor, locally sentenced felon, sentenced felon awaiting TDOC pickup, parole violator, probation violator and other. |
| Sentenced                    | This field should indicate whether the offender is sentenced or not.   |
| Sentenced length             | This field should represent the total net sentence for the offender, if he/she is sentenced. If the offender is not sentenced, this field should be empty.   |
| Initial classification level | This field should represent the results of the initial   |

|                             | classification, i.e. minimum, medium, maximum, close                          |
|-----------------------------|---|
| Initial classification date | This field should indicate the date the initial classification was completed. |
| Initial classification time | Corresponding 24 clock time for initial classification date.                  |

**Release File:** This file should contain one record of data for every individual that was released from the Davidson County Jail for the specified time period. This file should contain the following variables for each offender. Since some offenders are booked multiple times through the course of a few months, this file may contain multiple records per offender.

| Variable                  | Definition                                |
|---------------------------|---|
| CMIS number               | Unique offender/incarceration identifier  |
| Offender Number           | Unique offender identifier                |
| Gender                    | Sex of offender                           |
| Race                      | Race of offender                          |
| Date of birth             | Date of Birth of offender                 |
| County of residence       | This field is optional                    |
| Education level           | This field is optional                    |
| Marital Status            | This field is optional                    |
| Prior Convictions         | Number of prior convictions               |
| Drug/alcohol abuse        | Variable summarizing drug and alcohol     |
|                           | abuse history                             |
| Employment Status         | This field is optional                    |
| Offense Code              | This field should represent the most      |
|                           | serious offense the offender was          |
|                           | admitted for even if it is not his/her    |
|                           | current most serious charge. MIS          |
|                           | established hierarchy of offenses         |
|                           | should be utilized.                       |
| Offense Code Type (F/M)   | Felony or Misdemeanor indication of       |
|                           | most serious charge                       |
| Admission/Booking Date    | This field should represent the day on    |
|                           | which the offender was brought into the   |
|                           | Davidson County Jail                      |
| Admission/Booking Time    | Corresponding 24 clock time for           |
|                           | admission date                            |
| Legal Status at Admission | This field should indicate the legal      |
|                           | status the offender was in at THE TIME    |
|                           | OF ADMISSIONS. This should not            |
|                           | reflect what the inmate's legal status is |
|                           | currently or what he/she was released     |
|                           | under. The legal statuses are: pre-trial, |
|                           | sentenced DUI, sentenced                  |
|                           | misdemeanor, locally sentenced felon,     |
|                           | sentenced felon awaiting TDOC pickup,     |

|                                 | parole violator, probation violator and other.   |
|---------------------------------|--|
| Sentenced                       | This field should indicate whether the offender is sentenced or not.   |
| Sentenced length                | This field should represent the total net sentence for the offender, if he/she is sentenced. If the offender is not sentenced, this field should be empty.   |
| Release Date                    | This field should represent the day on which the offender was released from the Davidson County Jail   |
| Release Time                    | Corresponding 24 clock time for release date   |
| Release Reason                  | This field should indicate the reason the offender was release from custody  |
| Legal Status at time of release | This field should indicate the legal status the offender was in at THE TIME OF RELEASE. The legal statuses are: pre-trial, sentenced DUI, sentenced misdemeanor, locally sentenced felon, sentenced felon awaiting TDOC pickup, parole violator, probation violator and other. |
| Final classification level      | This field should represent the offender's final classification before release, i.e. minimum, medium, maximum, close   |
| Final classification date       | This field should indicate the date the last classification was completed.   |
| Final classification time       | Corresponding 24 clock time for final classification date.   |

**Stock File:** This file should contain one record of data for every individual that is currently housed in the Davidson County Jail for the specified date. This file should contain the following variables for each offender. Since it is a one day snapshot, there should only be one record of data per offender.

| Variable            | Definition                               |
|---------------------|--|
| CMIS number         | Unique offender/incarceration identifier |
| Offender Number     | Unique offender identifier               |
| Gender              | Sex of offender                          |
| Race                | Race of offender                         |
| Date of birth       | Date of Birth of offender                |
| County of residence | This field is optional                   |
| Education level     | This field is optional                   |
| Marital Status      | This field is optional                   |
| Prior Convictions   | Number of prior convictions              |

| Drug/alcohol abuse           | Variable summarizing drug and alcohol abuse history  |
|------------------------------|--|
| Employment Status            | This field is optional   |
| Offense Code                 | This field is optional  This field should represent the most serious offense the offender was admitted for even if it is not his/her current most serious charge. MIS established hierarchy of offenses should be utilized.  |
| Offense Code Type (F/M)      | Felony or Misdemeanor indication of most serious charge  |
| Admission/Booking Date       | This field should represent the day on which the offender was brought into the Davidson County Jail  |
| Admission/Booking Time       | Corresponding 24 clock time for admission date   |
| Legal Status at Admission    | This field should indicate the legal status the offender was in at THE TIME OF ADMISSIONS. This should not reflect what the inmate's legal status is currently or what he/she was released under. The legal statuses are: pre-trial, sentenced DUI, sentenced misdemeanor, locally sentenced felon, sentenced felon awaiting TDOC pickup, parole violator, probation violator and other. |
| Sentenced                    | This field should indicate whether the offender is sentenced or not.   |
| Sentenced length             | This field should represent the total net sentence for the offender, if he/she is sentenced. If the offender is not sentenced, this field should be empty.   |
| Current classification level | This field should represent the results of the initial classification, i.e. minimum, medium, maximum, close  |
| Current Legal Status         | This field should indicate the legal status the offender is/was currently in at the time of the snapshot. The legal statuses are: pre-trial, sentenced DUI, sentenced misdemeanor, locally sentenced felon, sentenced felon awaiting TDOC pickup, parole violator, probation violator and other.   |

Movement File: This file should contain the following data which must be created to capture

each legal status change for every inmate on the release file. There should be multiple records per offender in this file.

| Variable                 | Definition                               |
|--------------------------|--|
| CMIS number              | Unique offender/incarceration identifier |
| Offender Number          | Unique offender identifier               |
| Gender                   | Sex of offender                          |
| Legal Status Change Date | Date of legal status change              |
| Legal Status Change Date | Date of legal status time                |
| Previous Legal Status    | Legal status before change               |
| Current Legal Status     | Legal status after change                |

#### **NOTES ABOUT DATA PRACTICES**

**Data Not Collected:** For the admissions file, the release file, and the stock file, some variables were not collected into the final extract files. These variables were either unavailable, not used by the model, or were mostly missing data in JMS. The variables were county of residence, education level, marital status, prior convictions, drug/alcohol abuse, and employment status.

**Definition of Legal Status:** An inmate can have several legal statuses simultaneously. Legal statuses are ranked by seriousness in the JMS system. Legal status at admission is selected by taking the highest-ranking legal status at time of admission. Legal status at release is generally selected by taking the highest-ranking legal status at release with one important exception. In this version of the Davidson County jail projections, if the inmate was convicted of a charge during their jail stay we used legal status of the highest convicted charge. This created situations where the highest-ranking legal status was not always selected. For example, where an inmate becomes a convicted misdemeanor but has pending felony charges, he/she is classified as a convicted misdemeanant but should be a pretrial felon. This will be corrected in the next version of the Davidson County jail projections.

**Movement File:** Inmate movement data was captured in the release file. No separate movement file was extracted. Inmate movement was defined as the length of time between admission and highest-ranking legal status change (if legal status changed), between highest-ranking legal status change (if it changed) and release, and between admission and release if legal status didn't change. Please refer to the above paragraph "Definition of Legal Status" for an explanation of how the highest-ranking legal status at admission and release was defined. This practice will be evaluated before the next version of the Davidson County jail projections.

| GLOSSARY OF TERMS                        |  |  |
|--|--|--|
| Admissions                               | All people booked into the Nashville/Davidson County jail system. All arrestees are brought to the Criminal Justice Center ("CJC") for booking. If arrestees do not bond out and are not diverted to pretrial release, they are classified at CJC and assigned a housing location at either CJC or one of the other facilities.  |  |
| ADP                                      | Average Daily Population – The number of inmates in the Davidson County Jail system on an average day. The daily numbers that make up the monthly average come from nightly population counts. For the nightly population count, each inmate is counted once, and identified by the most serious charge classification currently against him/her. ADP includes locally sentenced felons, state sentenced felons in local facilities awaiting transfer to TDOC, sentenced misdemeanants, pretrial felons, pretrial misdemeanants, and probation violators (felons and misdemeanants). |  |
| Audit                                    | A type of jail release which refers to booking errors and issues not covered by other release codes. Audit can also refer to situations where inmates were released from Metro Detention Facility but not released from the Jail Management System at the proper time.   |  |
| Bond Out                                 | A type of jail release in which the arrestee pays an amount of money to the Court Clerk's Office and then is released from jail while waiting for their case to be finished. An agreement is made by a third party (usually a bonding company) to pay a certain sum of money if the defendant fails to appear in court.  |  |
| Citation                                 | A non-custodial arrest in which the offender is booked and given a court date, but not jailed unless outstanding warrants are discovered during the booking process. Citations are issued only for misdemeanor offenses.   |  |
| Crimes Against the Courts and Government | Crimes which are primarily Probation Violations, Parole Violations, Capias Misdemeanors, Capias Felonies, Contempt of Court, Fail to Appear, and Fail to be Booked.  |  |
| Felony                                   | A crime for which the least amount of punishment is one year.  |  |
| Legal Status                             | A charge classification that is assigned to every inmate in a Davidson County jail; represents the nature of the charge(s) against the inmate.   |  |
| Locally Sentenced<br>Felon               | A legal status identifying an individual who has been convicted of a felony offense and who received a sentence of 1-6 years. For the purposes of this report Locally Sentenced Felon also includes individuals receiving Split Confinement (1-6 yr  |  |

|                          | sentence, serving a determinate portion in jail and the rest on probation) and Parole Violators doing county time.   |
|--------------------------|--|
| LOS                      | Length of stay, usually calculated in days.  |
| Misdemeanor              | A crime for which the most amount of punishment is 11 months 29 days.  |
| Other Legal Status       | Other miscellaneous legal statuses such as Civil Contempt, Federal Inmate, Governors Warrant, and no data.   |
| Other Release Types      | Other miscellaneous release methods such as Court Orders, Death, Escape, ROR, Paid Out, Sleeper, and no data.  |
| Paid Out                 | A type of jail release in which the inmate is released after paying a financial responsibility (example: child support).   |
| Paroled                  | The conditional and revocable release of an inmate by the Board of Paroles to parole supervision. Parole is a conditional release from a correctional facility of a prisoner who has served part of the term/sentence to which he/she was sentenced.   |
| Part 1 Arrest            | An arrest for any Part 1 offense. Part 1 offenses are homicide, aggravated assault, burglary, larceny, rape, robbery, and vehicle theft. Because of their seriousness and frequency of occurrence, these 7 crimes serve as a basis for the FBI to calculate and compare the crime index for U.S. cities. |
| Part 2 Arrest            | An arrest for any Part 2 offense. Part 2 offenses are all offenses other than Part 1 offenses.   |
| Physical Arrest          | A custodial arrest in which the offender is booked into jail.  |
| Pretrial Felon           | A legal status identifying an individual who is awaiting trial on a felony charge  |
| Pretrial Misdemeanor     | A legal status identifying an individual who is awaiting trial on a misdemeanor charge   |
| Pretrial Release         | A special type of bond release in which the arrestee is released from jail through the pretrial release program. You are not required to post any money or property, but you must meet several special conditions.   |
| Probation                | A sentence of confinement which is suspended upon a term of probation supervision. It may include community service or restitution or both.  |
| Probation Violator Felon | A legal status identifying an individual who has violated a probation sentence on a felony conviction  |
| Probation Violator       | A legal status identifying an individual who has violated a  |
| Misdemeanor              | probation sentence on a misdemeanor conviction.  |
| Promise to Pay a Fine    | A type of jail release similar to probation in that a condition of release is to pay a fine.   |
| Releases                 | All people released from a Nashville/Davidson County jail facility. The jail facilities are Criminal Justice Center, Hill Detention Center, Correctional Work Center, and the Metro Detention Facility.  |

| ROR  | Released on Own Recognizance – a type of jail release with no bond by a judge.  |
|--|---|
| Sentence Completed<br>(also called Time<br>Served)             | A type of jail release in which the actual time served in jail by the inmate is judged to be the sentence length.   |
| Sentenced DUI  | A legal status identifying an individual who has been convicted of a driving under the influence.   |
| Sentenced Felon TDOC<br>(also called State<br>Sentenced Felon) | A legal status identifying an individual who has been convicted of a felony offense and who received a sentence of 6 yrs plus 1 day (or greater). For the purpose of this report, Sentenced Felon TDOC also includes State Parole Violators (6 yrs + 1 day or greater sentence) doing state time. |
| Sentenced<br>Misdemeanant                                      | A legal status identifying an individual who has been convicted of a misdemeanor offense (non-DUI).   |
| Sleeper  | A type of jail release in which the inmate belongs to another legal jurisdiction, is being transported somewhere and has spent the night in a DCSO jail facility along the way.   |
| Sworn Officer  | A commissioned officer of the Metropolitan Nashville Police Department with arrest powers   |
| Transfer to Another Authority                                  | A type of jail release in which a Davidson County inmate is transferred to another legal authority such as to TDOC, another county, Juvenile Court, etc.  |
| Weekender  | Some offenders may be allowed to serve their time on weekends only, so that they live at home and go to work during the week, but spend their weekends at a jail facility.  |